Public Health Messages

Missouri Department of Health and Senior Services
December 17, 2015

Public Health Messages **are a way for the Missouri Department of Health and Senior Services (DHSS) to provide information and guidance to medical providers and hospitals on current issues relating to medical care and public health. They are sent out through the Missouri Health Notification System (MOHNS), and go to the same individuals and facilities that receive DHSS Health Alerts and Health Advisories.** ***Public Health Messages*** **do not replace Health Alerts and Health Advisories, but rather provide an additional way for DHSS to communicate, in the form of brief messages, with providers and hospitals.**

Prevention of Mosquito-Borne Diseases in Persons Traveling to Tropical or Sub-Tropical Regions

As the holiday and winter travel seasons approach, health care providers and public health officials should provide counseling regarding prevention of mosquito-borne diseases such as chikungunya and dengue to persons traveling to tropical or sub-tropical regions (including Hawaii, where an outbreak of dengue fever is occurring).

Chikungunya and dengue are mosquito-borne illnesses that are present throughout the Caribbean region, Central and South America, Africa, Asia, and many island countries across the Indian and Pacific Oceans. Risk is highest to travelers going to areas with ongoing outbreaks of disease. Current information on risk and recommendations for travelers can be found through the Centers for Disease Control and Prevention (CDC) Traveler's Health website at http://wwwnc.cdc.gov/travel/.

Health care providers can also refer to *CDC Health Information for International Travel* (*Yellow Book*) at http://wwwnc.cdc.gov/travel/page/yellowbook-home, which provides a wealth of information regarding international travel precautions. Chapter 2, Protection against Mosquitoes, Ticks, & Other Arthropods, includes information that would be useful for persons traveling to tropical and sub-tropical areas and who might be at risk of acquiring mosquito-borne illnesses. Key preventive measures include use of effective insect repellents with EPA-registered active ingredients (these may not be available in some areas, so travelers should pack their own), wearing of appropriate protective clothing, and use of bed nets if accommodations will not be properly screened or air conditioned during the travel period.

Questions about vector-borne diseases can be directed to the Missouri Department of Health and Senior Services' (DHSS') Office of Veterinary Public Health (OVPH) at 573/526-4780.

Upward Trend in Reported Legionellosis Cases in Missouri

Legionellosis is a respiratory disease caused by *Legionella* bacteria that can cause fatal outcomes for those infected. Missouri has seen a significant upward trend in the number of legionellosis cases reported since 2005. This is similar to the increasing national trend of legionellosis cases observed during 2000-2012. Possible causes for the increase in reported cases include: a true increase in the frequency of disease due to several factors, such as an older U.S. population, more at-risk individuals, aging plumbing infrastructure, etc.; increased screening and reporting; and increased awareness of the disease among health care providers.

Most people with Legionnaires' disease will have pneumonia since the *Legionella* bacteria grow and thrive in the lungs. Legionellosis is not spread from person to person. *Legionella* grow best in warm water sources, such as hot tubs or hot water tanks. The infection is primarily acquired through inhalation of mist or vapor containing the bacteria, or by aspiration of contaminated water into the lungs. Environmental risk factors associated with legionellosis outbreaks are travel, residence in a health care facility, and proximity to cooling towers, whirlpool spas, decorative fountains, and grocery

produce misters. Though most individuals exposed to *Legionella* will not get sick, health care providers should consider screening for individuals with compatable signs/symptoms who have one or more of the following risk factors for legionellosis:

- Age of 50 years or older
- Diabetes
- Current or former smoker
- Chronic lung disease
- Weakened immune system, including recipients of a transplant or chemotherapy

Screening for legionellosis involves a urine antigen test, which detects *L. pneumophila* serogroup 1, the serogroup that most commonly causes the disease. If the urine antigen test is negative but legionellosis is still suspected, isolation of the bacteria via culture of respiratory secretions, lung tissue, pleural fluid, or a normally sterile site is required for diagnosis.

Legionellosis is a reportable disease in Missouri. All known or suspected cases should be reported to the local public health agency, or to DHSS at 573/751-6113 or 800/392-0272 (24/7). Questions should be directed to DHSS' Bureau of Communicable Disease Control and Prevention at 573/751-6113.

Anthrax Mass-Casualty Incidents: New Medical Management Recommendations from CDC

Bacillus anthracis, the causative agent of anthrax, is well known as a potential bioterrorism agent. According to CDC, models suggest that an aerosolized release of *B. anthracis* spores over a large urban population could result in a mass-casualty incident involving hundreds of thousands of illnesses and deaths. In such a situation, the number of persons requiring diagnosis and treatment would exceed the ability of the health care infrastructure to provide conventional standards of care.

On December 4, 2015, CDC released recommendations for the medical management of patients in an anthrax mass-casualty incident. These new recommendations, entitled "Clinical Framework and Medical Countermeasure Use During an Anthrax Mass-Casualty Incident," address elements of hospital-based acute care, specifically antitoxins and intravenous antimicrobial use, and the diagnosis and management of common anthrax-specific complications during a mass-casualty incident. Clinicians, hospital administrators, state and local public health officials, and planners can use these recommendations to assist in the development of crisis protocols that will ensure preparedness for an anthrax mass-casualty incident. The recommendations are available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6404a1.htm?s_cid=rr6404a1_w

It is noted that these new recommendations should be implemented only after predefined triggers have been met for shifting from conventional to contingency or crisis standards of care.

In addition, be aware that CDC has previously issued guidelines for anthrax prevention, and for treatment of anthrax in situations not involving anthrax mass casualties. These are available at: http://www.cdc.gov/anthrax/resources/recommendations/index.html.